

**SECRET***adm - 13.6*

NSC/PFIAB, NSA Reviews

Completed.

9 February 1973

MEMORANDUM FOR: Assistant Deputy Director for  
Intelligence  
Assistant Deputy Director for  
Science and Technology

SUBJECT : COINS Review Group

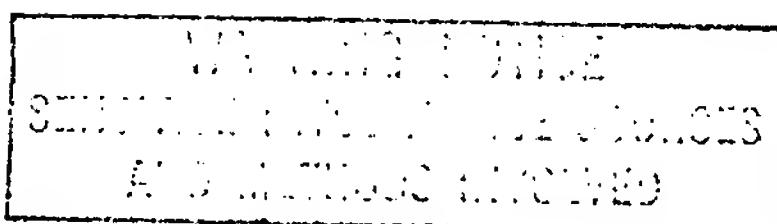
1. Last November, by agreement between Mr. Helms and Dr. Hall, an interagency Review Group was formed to review and evaluate the COINS system. I was named as CIA member of the Review Group, and I drew support from OPPB and CRS in Working Group meetings which were held to gather and sift data required for the study. Data on CIA files were provided by OER, OSR, CRS, NPIC, IAS and FBIS in the Intelligence Directorate and by OSI and FMSAC in the Directorate of Science and Technology.

2. The Review Group and its Working Group met numerous times in the past two months to review problems of present file adequacy and potential for expansion, security, present usage, alternatives to COINS and their costs, etc. Dr. Malkin--the Chairman of the Review Group--and his staff have now prepared a draft report. I understand that this report is now with Dr. Hall and that no more meetings of the Review Group are contemplated by Dr. Malkin. We have not been furnished with the final text of the basic report, but we have an early version that is probably close to the final one. The draft conclusions and recommendations have been sent to me and I attach a copy with some marginal notations I have made.

3. The following comments are prompted by an examination of the conclusions and recommendations, which address both the COINS system and its management environment. I have sent copies of this memorandum and attachments to Messrs. Eisenbeiss, Briggs, Iams and [redacted] plus the IC Staff.

25X1

25X1

**SECRET**

**SECRET**

4. From the user point of-view, I have no real problem with the recommendations to continue COINS and to make it possible for the system to handle TK data. The system really cannot be viable unless the exchange of TK information is permitted.

5. However, the principal conclusions are laced with words whose cumulative effect is to push the paper toward over-statement on behalf of the need for action to stimulate widespread on-line and interactive file access, and there is little recognition of the difficulties to be faced in accomplishing the results. Throughout the paper, there is consistently high profile to the requirement for being "on-line." Other agencies may have such a requirement for on-line file sharing, but I believe that these intense statements are at variance with the needs of our business day-to-day in this Agency and even with our needs as we see them developing for some time ahead.

6. One other point should be made, stemming from the "on-line" thrust of the paper. The conclusions call for adding new files to the COINS system and for system upgrading. One of these new files would be CRS' AEGIS file, which is not now in the system. There would be significant problems of practicality and cost for the Agency in putting this entire file on-line within the COINS network. The Agency does not now have the software to make this file on-line in the manner called for in the paper, and there would be security considerations, also, beyond the TK problem. Further, there is danger in letting the idea of system upgrading slip by unnoticed. When the upgrading concept is stretched--as the recommendations provide--to the idea of the entire networks being interactive, a whole new dimension of system complexity and cost is entered. The draft that we have seen calls for the COINS Project Management Office to submit a detailed plan for upgrading COINS to provide interactive capability and to include world-wide users.

7. Another of the paper's findings is that there are shortcomings in the way COINS is presently managed.

**SECRET**

**SECRET**

The Review Group did indeed perceive such shortcomings, but NSA was not seen as the culprit so much as the victim of a situation in which a single agency has been asked to substitute for community-level direction. The Chairman (not the Review Group, however, as the paper states) has proposed that

"The ASD(I) be appointed COINS executive agent under the auspices of the DCI with the COINS Project Management Office (PMO) made responsible to the executive agency."

This is a recommendation which Dr. Hall might make to the Director, but I do not believe it should be a part of the Review Group report. In the absence of a stronger role in COINS management by the DCI, a logical step would of course be a strengthening of COINS management authority within DOD which supplies most of the funds for COINS. One certain effect of such a change, however, would be to increase the authority of the DOD in COINS vis-a-vis the DCI. Dr. Malkin's proposal is one alternative to the continued drift of COINS authority, an alternative he appears willing to relinquish if the DCI desires to take charge and moves to do so.

8. I have told Malkin's staff man on this project--Norman Solat--that Review Group consideration of the draft would seem to be called for. He indicated a willingness to meet bilaterally with me, but that there were no plans to get the whole group together.

9. I suggest that I take the following actions:

a. Convey to Malkin suggestions for changes in the tone of the paper, so that it is less strident in its call to the colors.

b. Suggest to him also that some of the policy recommendations--those that are really not ones that "users" can appropriately address--be dropped from the paper itself.

**SECRET**

SECRET

These include:

--The recommendation that ASD(I) be appointed COINS executive agent.

--The recommendation relating to Intelligence program budget actions.

9. If you agree I will get back to Malkin on these points, though I may have to raise the noise level a bit to get his attention.

Deputy Director  
Strategic Research

25X1

Attachment:

Dr. Malkin's Draft  
Conclusions and  
Recommendations

SECRET

**SECRET****DRAFT CONCLUSION  
AND RECOMMENDATION****VIA!****VI. RECOMMENDATIONS****-WORKING PAPER-**

*Let's get down to business*

*No*

Based on the results of this study, the Review Group recommends the following:

1. The DCI direct that an aggressive program of automated information exchange be undertaken.
2. To implement the above, the Review Group proposes that the ASD (I) be appointed the COINS executive agent under the auspices of the DCI with the COINS Project Management Office (PMO) made responsible to the executive agency.
3. COINS funding be continued, subject to stipulations included below.
4. The USIB Security Committee and its Computer Security Subcommittee address the multi-level security problem with an eye toward immediate interim solution. This Review Group suggests that pending the attainment of a true multi-level security capability, the most practical course of action is:
  - a. to upgrade the entire COINS System to TK;
  - b. to handle Gamma and other compartmented data on a case-by-case basis with dedicated lines and terminals;
  - c. to handle extremely time-sensitive event data on a case-by-case basis with dedicated lines and terminals.
5. The COINS data base be purged of files for which little or no interest has been demonstrated, and other available non-COINS machine files for which interest has been expressed should be included in COINS as quickly as possible. A complete listing of file suggestions, including additions, modifications, and new files to be added is included as Attachment B.
6. Present COINS reporting procedures be modified to allow the collection of statistics more amenable to permitting evaluation of system usage, timeliness, and effectiveness. The COINS project manager should be directed to submit a plan for statistical reporting

**SECRET WORKING PAPER**

SECRET

WORKING PAPER

VI-2

which would (a) identify the objectives of such reporting (i. e. what must be learned about the system), (b) the items of data to be collected to satisfy the objectives, and (c) the analysis to be performed on the data to provide the desired information.

7. The COINS Project Manager and each participating organization take appropriate steps to accelerate and expand the program to train, inform, and motivate both users and potential users.

8. The COINS PMO submit a detailed plan for an upgraded system which will address the weaknesses noted in Section V in a cost-effective manner. Specifically to be addressed are means to eliminate the switch, provide interactive capability to all users, and the inclusion of world-wide user hosts and participants.

9. The ASD (I) direct that Automated Information Exchange be included as a budget line item under Program Element 3.

No

Should  
be #1  
or #2

WORKING PAPER

SECRET

~~SECRET~~

*(One copy)*  
V-1

# WORKING PAPER

## V. CONCLUSIONS

### A. Requirement for Automated Information Exchange

The general conclusion regarding the exchange of information on-line is that a requirement presently exists and the requirement will [significantly] increase in the [near] future. This conclusion is supported by a number of observations.

1. There is an increasing dissatisfaction within the community with manual files generally. There is a correspondingly growing awareness within agencies of the existence of files on-line in other agencies for which access would be desirable and beneficial.
2. There are large bodies of information presently collected which by their very essence can only be disseminated in an efficient manner on-line. Special processing centers are increasingly maintaining such information on-line, and the prognosis is for rapid expansion. Examples are air movements, naval movements, photography readouts, etc.
3. When one agency maintains information on-line, the most, and in some instances the only efficient means of access, is on-line.
4. The user agencies in the Washington area are expending resources to participate in the COINS experiment and additional organizations both inside and outside of the Washington area have expressed a requirement to participate.
5. The user agencies represented on this Review Group have expressed high interest in on-line access to a total of 54 existing files of which 12 are presently available through COINS. *VARIABILITY OF INTEREST*
6. Available data show that more than one third\* of the COINS interrogations represent one organization interrogating the files of another. *VERY SOFT DATA*

\* The exact percentage cannot be determined at this time due to statistical inadequacies. The DIAOLS system files may be accessed from terminals in either a batch mode or interactively, at the option of the interrogator. Interrogations through the network switch may only access the files in a batch mode. DIA does not consider interactive access as part of the COINS system and has not provided a means to count such interrogations. Therefore, the percentage quoted above refers only to interrogations in the batch mode.

~~SECRET WORKING PAPER~~

**SECRET**

V-2

# WORKING PAPER

## B. COINS Effectiveness

COINS has demonstrated that on-line data base exchange among community users is feasible and achievable. This conclusion is supported by the following observations:

1. COINS now provides operational support to community users and has a potential for even greater operational utility. Additionally, it has developed experience for the community in dealing with such problems as:  
*and some limited success*
  - a. Netting together of diverse computer systems.
  - b. Management of diverse networks.
  - c. Security
  - d. Data standards
  - e. Retrieval languages
  - f. User education and support
2. An organizational structure providing the mechanism for the handling of present and future problems of interagency exchange has been evolved.  
*Among the primary users of the system*
3. There is general satisfaction with the ability of COINS to provide timely responses to interrogations. Median response time of less than 20 minutes; with an average response time of less than one hour is now the rule. This is considered timely for batch mode interrogations.
4. Analysts have been provided a manipulative capability which has helped to enhance their effectiveness, and has resulted in an overall manpower savings.
5. A number of daily electrical end product reports have been replaced by on-line COINS access tailored to consumer requirements, at the same time relieving a burden on communication facilities.

*providing  
present  
overcome*

# WORKING PAPER

**SECRET**

**WORKING PAPER**

V-3

6. The above benefits have been achieved at a minimal cost through the use of existing hardware and software. Very little of the FY 73 operating cost is unique to COINS

25X1

**C. COINS Weaknesses**

The study has revealed notable shortcomings in the present COINS approach to information exchange. Some of these are management-oriented, and others purely technical.

1. The assignment [redacted] for the COINS experiment has not provided sufficient management scope to deal effectively with relevant problems of conflict between agencies regarding roles and missions with regard to intelligence collection, processing, dissemination and production.

25X1

25X1

*#3*  
2. The community is not satisfied with the selection of files available through COINS. In this connection it must be stressed, however, that the decision to place any file on COINS rests wholly with the sponsoring agency. Efforts being made to change COINS files at present must deal on a relatively low priority basis with other agency problems. In the last analysis, COINS is only as good as the files which may be accessed through it.

*#1*  
3. Security and compartmentation is a critical issue. Significant information is now excluded because of security restrictions. Without a solution to this problem, COINS or any other general information exchange network will be of limited value. Solutions to this problem have been proposed and the Computer Security Subcommittee has them under advisement.

*#2*  
4. File maintenance and updating needs improvement. Agencies have maintained only those files which are of internal operational value, and have also resisted external pressures to alter data formats and query systems, or to include more detailed data than they themselves need.

5. Education, documentation, and training of users and potential users are problems of continuing concern because of the changes in the user population, the addition or modification of files, and changes in service.

**SECRET****WORKING PAPER**

WORKING PAPER

V-4

6. The present COINS configuration limits its capability for expansion to satisfy future interagency access requirements.

a. The system is not interactive, which limits its usefulness for certain types of data.

b. Reliance on the switch is inconvenient. Closure at night can prevent access to certain needed files. Switch failure can be critical.

*also  
and over  
and high security*

WORKING PAPER

SECRET

25X1

MEMORANDUM FOR: DD/S&T

Attached memo has been drafted by Dr. [redacted] and me, to reply to Adm. Anderson's letter on COINS (also attached).

The approach taken in our draft is intentional, in that we understand the DCI does not desire at this time to respond directly to all the specifics of the PFIAB letter.

I am instructed to request your review and concurrence this afternoon. Thank you for your cooperation [redacted]

25X1

Acting Chairman, IHC  
3 Oct 73  
(DATE)

FORM NO. 101 REPLACES FORM 10-101  
1 AUG 54 WHICH MAY BE USED.

(47)

Com - 6

THE DIRECTOR OF CENTRAL INTELLIGENCE

WASHINGTON, D. C. 20505

3 October 1973

Dear Admiral:

Responding to your letter of September 25th, I am initially approaching COINS with two steps in mind. Most immediately I want to satisfy myself that I have developed a sound basis for making the judgments that lie ahead. To do this, I am now selecting an experienced individual from CIA and have asked the ASD(I) to supply another. These two individuals will be charged with making a prompt assessment for me of what is feasible relative to a larger-scale community system, the capabilities it might have, and the costs it might incur. I do not intend to re-do the so-called Malkin study, but I feel the need for a fairly current assessment that will put things in my frame of reference.

Pending the results of this survey -- with which I expect to understand the essence of the problem -- I am open-minded as to the future architecture and overall concept for COINS. I believe certain technical upgrading is immediately possible, and Dr. Hall and I are moving to make initial commitments that will realize benefits for system users in the short run. Given the severe budget squeeze that faces us, I have yet to determine how much further it is effective to go in building a sophisticated on-line system. The need for COINS, as a communication network, to interface with DoD's IDHS and WWMCCS, raises technical problems in which the intelligence community does not have full freedom to determine solutions.

There is an areas, however, where we can make immediate progress. We will improve files now in COINS and set standards for those that are placed in the system in the relatively near future. Here, I have undertaken a number of specific actions, along the following lines:

-- File content and coverage. I am now taking steps to involve the substantive USIB committees in working with the USIB Intelligence Information Handling Committee (IHC) to validate community need for particular kinds of data and to provide guidance on the content, coverage and format of files. For example, if COINS were to include a new file on the subject of nuclear energy, JAEIC should be involved in providing insights on behalf of potential users. The Intelligence Community (IC) Staff also has a responsibility in the matter of file content.

-- File completeness. A survey is now underway by the IC Staff to illustrate and characterize the security and dissemination restrictions that must be dealt with to make data in COINS files more complete and accessible throughout the community. Based on the results of this survey, which I expect to have in hand within two weeks, we will begin an orderly examination of this problem using the USIB Security Committee.

-- User assistance. I am asking that the interagency Data Base Working Group make, as a regular part of its survey of files for COINS, an examination of the adequacy of cross-reference notations and user instructions contained in the files. Where worthwhile improvements can be made, we will modify the programs that produce data for users.

-- File reliability. Upon completion of the assessment that I mentioned at the outset, I expect to share the results of that survey with USIB members. At that time I will ask them to accept specific responsibilities for producing and maintaining certain COINS files and for assuring their accuracy and completeness.

-- Analytical content. The IC Staff is now testing, for use in crisis and warning situations, the rapid exchange of current intelligence in a national operations and intelligence watch officers network running among the Washington area command centers. Watch officer bulletins might prove a worthwhile addition to COINS files. I am particularly interested in this project because it could take us one more step in expanding the on-line use of formatted intelligence materials for a somewhat more sophisticated user than the average COINS user at present.

I reactivated the USIB Intelligence Information Handling Committee which had been dormant since the retirement of General Robert Taylor last March. I have instructed the new incumbent to take energetic action to carry out DCID responsibilities that bear on the steady upgrading of COINS. In another direction, you will find that the Objectives for the Intelligence Community, which I forwarded to the President on September 6th, and which as you know he has approved, include actions that could result in the development of a number of new data files and arrays. If any of these appear appropriate for COINS, we will, I think, be able to recognize this at the outset of our planning and take advantage of the opportunity.

W. E. Colby

THE WHITE HOUSE

WASHINGTON

## PRESIDENT'S FOREIGN INTELLIGENCE ADVISORY BOARD

DCI/IC 73-10501

Executive Registry  
73-55341

September 25, 1973

Dear Bill:

The Board's Science Panel, chaired by Dr. William O. Baker, reviewed the status of the Community On-Line Intelligence System (COINS) during the morning of September 6, 1973. A copy of the agenda and list of attendees are attached.

The Board's interest in COINS dates back to its recommendation to President Johnson in 1965 for the development of a computerized, community-wide system of exchanging intelligence data. Early in his first Administration, President Nixon endorsed a sustained effort to achieve such a system and directed the Board to stimulate and monitor progress toward this end.

The Panel discussion reaffirmed that there has been commendable progress on the technological side, but established no corresponding development toward an agreed community concept to guide the technical capability. The result is that COINS has an ad hoc management structure, insufficient program visibility and support, and reluctant participation by some agencies whose self-defined needs are not met by COINS in its present form. Some unanswered questions are:

- Is there a need for a national intelligence data base which establishes responsibility for the maintenance of community files and which declares information held by the several intelligence agencies to be the shared property of all?
- Is COINS to serve intelligence analysts exclusively (for example, as a tool to manipulate raw data), or ought it also to include product consumers as participants?
- Should there be a single intelligence data-handling system, or are there legitimate requirements for a multiplicity of inter-intelligence community systems?

CLASSIFIED BY PFIAB  
 EXEMPT FROM GENERAL DECLASSIFICATION  
 SCHEDULE OF EXECUTIVE ORDER 11652  
 EXEMPTION CATEGORY S 5 B (2)  
 AUTOMATICALLY DECLASSIFIED ON Undetermined

CONFIDENTIAL

-2-

As a result of its examination, the Panel believes that the current improvement trends should continue, but recommends that COINS be given immediate high-level attention in order to:

- delineate the specific objectives which a community system should achieve, i. e., a concept paper;
- develop an agreed community plan to implement these objectives;
- identify the management structure best suited to implement the plan, and manage the program on behalf of the entire Intelligence Community.

The formulation of an agreed community concept and an agreed plan of implementation are acknowledged to involve complex problems, notwithstanding the years of accumulated experience with COINS. However, in the absence of their being definitively articulated and accepted as authoritative doctrine, it is clear that COINS will not achieve the status of a community-wide data-sharing system. At best, it will remain but one of several independently pursued and very costly information-handling retrieval systems. Most importantly, the greater interest of intelligence consumers will not be served.

To accomplish the aforementioned recommendations will require both the unqualified cooperation of the principals involved and sufficient fiscal and personnel resources. Given the complexity and superimposing nature of the problem relative to the individual intelligence agencies, assistance from outside the government may be desirable. Without minimizing the crucial importance in this process of the Secretary of Defense and the Director of the Office of Management and Budget, it is axiomatic that these tasks be performed under the direct guidance of the Director of Central Intelligence.

The Board would be pleased to nominate, for your consideration, individuals it believes qualified to spearhead the project definition phase, and of course extends its offer to assist you further in every way.

Sincerely,

*George W. Anderson*  
George W. Anderson, Jr.  
Admiral, USN (Ret.)  
Chairman

The Hon. William E. Colby  
Director of Central Intelligence  
Washington, D. C. 20505

cc: Dr. Albert C. Hall, ASD(I)  
Mr. Bernard Bridgewater, Associate Director, OMB

Status Briefing

Sept. 6

8:30 a.m. Executive Session

8:45 Introductory Remarks Mr. Morton Goulder, Deputy Assistant Secretary of Defense (Intelligence) for Intelligence and Warning Systems (I&WS)

8:50 COINS Background and Status [redacted] COINS Project PL 86-36 25X1

9:10 ASD(I) Review of COINS for the Intelligence Resources Advisory Committee (IRAC) Mr. Norman Solat, COINS Project Officer, ASD(I)

9:20 COINS File Content and Product Review Maj. Gen. Daniel O. Graham, USA, DCI/Intelligence Community Staff

9:30 User Views [redacted] Consultant, NSA Analyst 25X1 - DIA analyst PL 86-36

10:00 Break

10:15 Executive Agent Role Mr. Goulder

10:20 Data Base Review Mr. Solat

10:30 Summary of Ongoing Activities -- retrieval languages -- user support -- network management [redacted] 25X1 PL 86-36 25X1

10:45 Restructuring of the COINS Network ("COINS II"); relationship to the Intelligence Data Handling System (IDHS) [redacted] NSA Data Processing Support Group

11:00 Computer Security [redacted] 25X1

11:10 Management Summary [redacted]

11:15 Discussion

11:30 Executive Session

CONFIDENTIAL

PFLAB Science Panel

Dr. William O. Baker, Chairman  
Dr. Edwin H. Land  
Dr. Edward Teller  
Dr. John S. Foster, Jr.

PFLAB Staff

Mr. Wheaton B. Byers  
Cdr. Lionel H. Olmer, USN

Agenda Participants

DCI

25X1 [redacted] - DCI/Intelligence Community Staff  
Maj. Gen. Daniel O. Graham - DCI Intelligence Community Staff  
25X1 [redacted] - DCI/Intelligence Community Staff

CIA

Mr. Charles Briggs, Deputy Director CIA for Plans, Programs & Budget

Defense

Mr. Morton Goulder, Deputy Asst. Secy of Defense (Intelligence) for  
Intelligence and Warning Systems (I&WS)

Mr. Norman Solat, COINS Project Officer, ASD(I)

Mr. Albert Albrecht, ASD(I) Staff

25X1 [redacted] list  
[redacted] DIA analyst

Mr. Robert C. Selby, Civilian with AFINAR (Asst. Chief of Staff for  
Intelligence, Air Force)

NSA

25X1 [redacted]

Don:

I have to go directly from the morning meeting to brief the Senior Seminar in the Chamber of Commerce Bldg. [redacted] was anxious to get a response to the COINS letter. I have no basic problem with the letter and think in general it is consistent with our discussion of this subject at the Management Meeting. I believe there is one missing link, however. It was my clear understanding that we will identify not one but several people, some of them computer experts, and some data base and user types. They are to look within CIA first as to our need for a COINS type system, second existing files which might lend themselves to a COINS type activity, and third whether indeed we believe one massive system or several smaller specialized systems are the best answer from the Agency point of view.

25X1

25X1

Bill might not want to be that specific in the letter to PFIAB but I would appreciate it if you would chat with [redacted] and [redacted] on this point before the letter is forwarded. I talked to Paul Walsh today and Paul's understanding of what happened is the same as mine. I presume Paul may have already talked to [redacted] so you may wish to query him first before getting involved with the IC staffers.

25X1

25X1

Incidentally, I did not have a chance to tell you but Danny was at the table and introduced as the new Deputy for IC. It was further announced that [redacted] would remain in his present job as No. 2.

25X1